

Fischer B, Hartnegg K, 2000, "Effects of visual training on saccade control in dyslexia" *Perception*29(5) 531 – 542
[Download citation data in RIS format](#)

Effects of visual training on saccade control in dyslexia

Burkhart Fischer, Klaus Hartnegg

Received 1 June 1998, in revised form 2 February 2000

Abstract. This study reports the effects of daily practice of three visual tasks on the saccadic performance of 85 dyslexic children in the age range of 8 to 15 years. The children were selected from among other dyslexics because they showed deficits in their eye-movement control, especially in fixation stability and/or voluntary saccade control. Their eye movements were measured in an overlap prosaccade and a gap antisaccade task before and after the training. The three tasks used for the training included a fixation, a saccade, and a distractor condition. In any of these tasks, the subject had to detect the last orientation of a small pattern which rapidly changed its orientation between up, down, right, and left, before it disappeared after some time. The task was to press one of four keys corresponding to the last orientation. The visual pattern was presented on an LCD display of a small hand-held instrument given to the children for daily use at home. The results indicate that daily practice improved not only the perceptual capacity, but also the voluntary saccade control, within 3 to 8 weeks. After the training, the group of dyslexics was no longer statistically different from the control group.